PATENT

AMENDMENTS

In the Claims

1-115. (Cancelled)

116. (Previously Presented) A method comprising: selecting a set of instances from a set of data;

determining a number of related records in a set of related records of a table, wherein each record of the set of related records is related to one instance of the set of instances;

comparing the number of related records and a number of instances in the set of instances prior.

to generating a set of select statements to select the set of related records from the table;
and

if the comparing indicates that the number of instances is greater than the number of related records,

generating the set of select statements to comprise one select statement to select the set of related records from the table, wherein

the one select statement includes a clause to select a corresponding record for each instance of a set comprising a maximum number of instances of the set of instances,

the maximum number of instances is determined by a maximum number of clauses in the one select statement, and

the one select statement is configured to

cause an update operation to be performed on a record in the table, if the record already exists in the table, and

cause an insert operation to be performed to insert the record in the table, if the record does not already exist in the table.

117. (Cancelled)

118. (Previously Presented) The method of claim 116 wherein the generating is performed if the number of instances is substantially greater than the number of related records, and

- the number of instances is substantially greater than the number of related records when a ratio between the number of instances and the number of related records is larger than a specified value.
- 119. (Previously Presented) The method of claim 118 wherein the specified value is 7.
- 120. (Previously Presented) The method of claim 116 further comprising: executing the one select statement;
- after executing the one select statement, determining a set of respective operations to perform on the table, wherein
 - each respective operation of the set of respective operations affects a respective record in the table, and
 - each respective record corresponds to one instance of the set comprising the maximum number of instances; and
- generating a set of SQL statements to perform each respective operation of the set of respective operations, wherein

the set of SQL statements does not join the table to another table.

- 121. (Previously Presented) The method of claim 120 wherein each respective operation is one of
 - an update operation to update an existing record in the table and an insert operation to insert a new record in the table.
- 122. (Previously Presented) The method of claim 121 further comprising: executing the set of SQL statements to provide the respective record in the table for each instance of the set comprising the maximum number of instances.
- 123. (Previously Presented) The method of claim 121 wherein the generating the one select statement comprises
 - constructing a select clause to select a record from a plurality of records in the table, wherein

the record has identifying data for one instance of the set comprising the

maximum number of instances; and
concatenating to the select clause a respective OR clause to select a
subsequent record for each subsequent instance of the set
comprising the maximum number of instances excluding the one
instance.

124. (Previously Presented) The method of claim 121 wherein the determining the respective operation for a first instance of the set comprising the maximum number of instances comprises:

comparing respective data in each respective record of a plurality of records in the table to identifying data for the first instance; and

if the identifying data for the first instance matches the respective data of a first record of the plurality of records,

determining that the respective operation for the first instance is the update operation;

and

if the identifying data for the first instance does not match the respective data of any record of the plurality of records,

determining that the respective operation for the first instance is the insert operation.

125. (Previously Presented) The method of claim 124 wherein the generating the set of SQL statements further comprises

if the respective operation is the update operation,

adding an update statement to the set of SQL statements to update the first record using instance data from the first instance.

126. (Previously Presented) The method of claim 124 wherein the generating the set of SQL statements further comprises

if the respective operation is the insert operation,

adding an insert statement to the set of SQL statements to insert a second record into the table using instance data from the first instance.

- 127. (Previously Presented) The method of claim 118 wherein
- if the comparing indicates that the number of instances is not substantially greater than the number of related records,
 - generating the set of select statements to include the one select statement for each instance of the set of instances;
 - executing each statement of the set of select statements prior to generating a subsequent select statement of the set of select statements.
- 128. (Previously Presented) The method of claim 116 wherein the determining the number of related records is performed without selecting the set of related records from the table.
 - 129. (Currently Amended) A system comprising:

processing means for processing information, the processing means comprising

selecting means for selecting a set of instances from a set of data[(;)],

determining means for determining a number of related records in a set of related records of a table, wherein

each record of the set of related records is related to one instance of the set of instances:

- comparing means for comparing the number of related records and a number of instances in the set of instances prior to generating a set of select statements to select the set of related records from the table:—and,
- generating means for generating the set of select statements to comprise one select statement to select the set of related records from the table if the comparing indicates that the number of instances is greater than the number of related records, wherein
 - the one select statement includes a clause to select a corresponding record for each instance of a set comprising a maximum number of instances of the set of instances,
 - the maximum number of instances is determined by a maximum number of clauses in the one select statement, and the one select statement is configured to

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cause an update operation to be performed on a record in the table, if the record already exists in the table, and

cause an insert operation to be performed to insert the record in the table, if the record does not already exist in the table; and

memory means for storing, wherein

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the memory means and the processing means are coupled to one another, and the memory means is configured to store at least one of at least a portion of the table and at least a portion of the set of data.

- 130. (Cancelled)
- 131. (Previously Presented) The system of claim 129 further comprising: executing means for executing the one select statement;
- second determining means for determining a set of respective operations to perform on the table after executing the one select statement, wherein
 - each respective operation of the set of respective operations affects a respective record in the table, and
 - each respective record corresponds to one instance of the set comprising the maximum number of instances; and
- second generating means for generating a set of SQL statements to perform each respective operation of the set of respective operations, wherein the set of SQL statements does not join the table to another table.
- 132. (Previously Presented) The system of claim 131 wherein each respective operation is one of an update operation to update an existing record in the table and
 - an insert operation to insert a new record in the table.
- (Currently Amended) A computer-readable storage medium comprising: selecting instructions configured to select a set of instances from a set of data; determining instructions configured to determine a number of related records in a set of related

records of a table, wherein

each record of the set of related records is related to one instance of the set of instances;

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- comparing instructions configured to compare the number of related records and a number of instances in the set of instances prior to generating a set of select statements to select the set of related records from the table; and
- generating instructions configured to generate the set of select statements to comprise one select statement to select the set of related records from the table if the comparing indicates that the number of instances is greater than the number of related records, wherein the one select statement includes a clause to select a corresponding record for each instance of a set comprising a maximum number of instances of the set of instances,
 - the maximum number of instances is determined by a maximum number of clauses in the one select statement, and

the one select statement is configured to

cause an update operation to be performed on a record in the table, if the record already exists in the table, and

cause an insert operation to be performed to insert the record in the table, if the record does not already exist in the table.

- 134. (Cancelled)
- 135. (Currently Amended) The computer-readable <u>storage</u> medium of claim 133 further comprising:

executing instructions configured to execute the one select statement;

- second determining instructions configured to determine a set of respective operations to perform on the table after executing the one select statement, wherein
 - each respective operation of the set of respective operations affects a respective record in the table, and
 - each respective record corresponds to one instance of the set comprising the maximum number of instances; and
- second generating instructions configured to generate a set of SQL statements to perform each respective operation of the set of respective operations, wherein the set of SQL statements does not join the table to another table, and each respective operation is one of

an update operation to update an existing record in the table and an insert operation to insert a new record in the table.

136. (Cancelled)

the instructions comprise:

137. (Previously Presented) A computer system comprising:
a processor to execute instructions; and
a memory to store the instructions, wherein
the memory is coupled to the processor, and

selecting instructions configured to select a set of instances from a set of data; determining instructions configured to determine a number of related records in a set of related records of a table, wherein

each record of the set of related records is related to one instance of the set of instances;

comparing instructions configured to compare the number of related records and a number of instances in the set of instances prior to generating a set of select statements to select the set of related records from the table; and

generating instructions configured to generate the set of select statements to include one select statement to select the set of related records from the table if the comparing indicates that the number of instances is greater than the number of related records, wherein

the one select statement includes a clause to select a corresponding record for each instance of a set comprising a maximum number of instances of the set of instances,

the maximum number of instances is determined by a maximum number of clauses in the one select statement, and

the one select statement is configured to

cause an update operation to be performed on a record in the table, if the record already exists in the table, and cause an insert operation to be performed to insert the record in the table, if the record does not already exist in the table.

- 138. (Cancelled)
- 139. (Previously Presented) The computer system of claim 137 wherein the instructions further comprise:

executing instructions configured to execute the one select statement;

- second determining instructions configured to determine a set of respective operations to perform on the table after executing the one select statement, wherein
 - each respective operation of the set of respective operations affects a respective record in the table, and
 - each respective record corresponds to one instance of the set comprising the maximum number of instances; and
- second generating instructions configured to generate a set of SQL statements to perform each respective operation of the set of respective operations, wherein the set of SQL statements does not join the table to another table.
- 140. (Previously Presented) The computer system of claim 139 wherein each respective operation is one of
 - an update operation to update an existing record in the table and an insert operation to insert a new record in the table.
 - 141. (Currently Amended) A system comprising:
- a selecting module configured to select a set of instances from a set of data;
- a determining module configured to determine a number of related records in a set of related records of a table, wherein
 - each record of the set of related records is related to one instance of the set of instances;
- a comparing module configured to compare the number of related records and a number of instances in the set of instances prior to generating a set of select statements to select the set of related records from the table; [[and]]
- a generating module configured to generate the set of select statements to comprise one select statement to select the set of related records from the table if the comparing indicates that the number of instances is greater than the number of related records, wherein the one select statement includes a clause to select a corresponding record for each

instance of a set comprising a maximum number of instances of the set of instances,

the maximum number of instances is determined by a maximum number of clauses in the one select statement, and

the one select statement is configured to

cause an update operation to be performed on a record in the table, if the record already exists in the table, and

cause an insert operation to be performed to insert the record in the table, if the record does not already exist in the table; and

a processor, wherein the processor is configured to execute at least one of the selecting

module, the determining module, the comparing module and the generating module;

and

a memory, wherein

the memory and the processor are coupled to one another, and
the memory is configured to store at least one of the selecting module, the
determining module, the comparing module and the generating module.

- 142. (Cancelled)
- 143. (Previously Presented) The system of claim 141 further comprising:
 an executing module configured to execute the one select statement;
 a second determining module configured to determine a set of respective operations to perform
 on the table after executing the one select statement, wherein
 each respective operation of the set of respective operations affects a respective record in
 the table, and
 each respective record corresponds to one instance of the set comprising the maximum
- a second generating module configured to generate a set of SQL statements to perform each respective operation of the set of respective operations, wherein the set of SQL statements does not join the table to another table.
 - 144. (Previously Presented) The system of claim 143 wherein

number of instances; and

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each respective operation is one of

an update operation to update an existing record in the table and
an insert operation to insert a new record in the table.